| *Notice of Allowability* | Application No. | Applicant(s) |  |
|---|---|---|---|
|  | 09/607,914 | CHENG ET AL. |  |
|  | Examiner | Art Unit |  |
|  | C. Michelle Tarae | 3623 |  |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--*

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Amendment filed June 13, 2006*.

2. ☒ The allowed claim(s) is/are *1-3,5-13,15-17,19-27,29-31 and 33-41*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None  of the:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

       3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached

       1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

    **Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

**ALLOWANCE**

1.      The following is an Allowance in response to the Amendment submitted on June 13, 2006.  Claims 1, 15 and 29 have been amended.  Claims 4, 14, 18, 28, 32 and 42 have been previously cancelled.  Claims 1-3, 5-13, 15-17, 19-27, 29-31 and 33-41 are now pending in this application.

*Examiner's Amendment*

2.      An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Alan Young (37,970) on September 28, 2006.

In the claims:

In claim 1, line 7:

        **delete**  --causing the computer to compute--

        **insert** in its place  --computing, on the computer,--

In claim 1, line 13:

        **insert** after the first word, categorizing  --, on the computer,--

In claim 15, line 12:

 **delete** --at least one of the processes causing the processor to compute--

 **insert** in its place --computing--

In claim 19:

 **replace entire claim with**: The computer system of Claim 15, wherein the categorizing processing logic is further configured to assign a customer to one of a plurality of stages according to which of the plurality of categorization criteria is satisfied.

In claim 25:

 **replace entire claim with**: The computer system of Claim 22, wherein the customer selection processing logic is further configured to access a remote database wherein customer information for a plurality of customers is stored.

In claim 26:

 **replace entire claim with**: The computer system of Claim 25, wherein the customer selection processing logic is further configured to access the database over a computer network.

### *Reasons for Allowance*

3.      Claims 1-3, 5-13, 15-17, 19-27, 29-31 and 33-41 are allowed.

4.      The following is an examiner's statement of reasons for allowance:  None of the

prior art of record, taken individually or in any combination, teach, *inter alia*, computing a

lifecycle factor for an individual customer by determining an absolute value of a

difference of a selected measure and by multiplying the determined absolute value with

a percentage measure growth of the selected measure, the difference and the

percentage measure growth being determined over two selected historical periods, and

then categorizing the individual customer based on the computed lifecycle factor, as

recited in independent claims 1, 15 and 29.


Applicant's remarks in the Amendment received July 27, 2006 are persuasive

and commensurate with the originally filed disclosure and the claims as amended.  In

particular, Applicant remarks (on page 4 of Remarks):

> "It is respectfully submitted that the improper Official Notice argument was, in
> turn, improperly used to reconstruct applicant's claimed invention by hindsight.
> Indeed, it is respectfully submitted that this rejection is a hindsight reconstruction,
> using applicant's claim as a template to reconstruct the invention from an
> unsupported and incomplete assertion of Official Notice."

Examiner finds Applicant's hindsight argument persuasive, particularly as it

relates to *determining an absolute value of a difference of a selected measure and by*

*multiplying the determined absolute value with a percentage measure growth of the*

*selected measure,* since, in light of Examiner's prior art most closely resembling

Applicant's claimed invention, any teaching to *determine an absolute value of a*

*difference of a selected measure and multiply the determined absolute value with a*

*percentage measure growth of the selected measure,* would have come from

Applicant's own disclosure.

Additionally, the discussion of Table 1 on pages 10-11 of the Specification details

the particularities of the formula required to compute the lifecycle factor and further

explains that the lifecycle factor represents the size and growth of the individual

customer's relationship with a company. The disclosure on pages 10-11, in

combination with Applicant's response filed December 9, 2004 to the Rule 105

Requirement for Information dated 10/27/04, in which Applicant declared the lifecycle

factor formula to be derived from Applicant's own research and not taken from any

known reference, provide further support to Examiner's reasons for allowance.

The prior art most closely resembling Applicant's claimed invention are as

follows: McArdle et al. (U.S. 6,622,126) and Deaton et al. (U.S. 5,638,457).

McArdle et al. teaches segmenting, or categorizing, customers based on their

historical purchasing behaviors, where the segmenting is for a particular time period.

For example, a customer may be assigned to a segment (i.e., the purchaser of men's

clothing segment) based on where they spent the greatest dollar amount in a given

month. McArdle et al. further discloses comparing a customer's historical purchasing

behaviors over time periods (i.e., monthly) to determine whether the customer should be

assigned to a different segment. However, McArdle et al. does not disclose computing

a lifecycle factor for an individual customer by determining an absolute value of a difference of a selected measure and by multiplying the determined absolute value with a percentage measure growth of the selected measure, the difference and the percentage measure growth being determined over two selected historical periods, and then categorizing the individual customer based on the computed lifecycle factor.

Deaton et al. (U.S. 5,638,457) teaches tracking customers' transactional behavior such as frequency, dollar volume, departments shopped and products purchased over specified time intervals and develops customer profiles based on the tracked transactional data. Customers are further assigned a status, or category, based on their tracked transactional data. However, Deaton et al. does not disclose computing a lifecycle factor for an individual customer by determining an absolute value of a difference of a selected measure and by multiplying the determined absolute value with a percentage measure growth of the selected measure, the difference and the percentage measure growth being determined over two selected historical periods, and then categorizing the individual customer based on the computed lifecycle factor.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Liu et al. (U.S. 6,839,680) discusses a system for profiling customers based on their Internet behavior;

- JP409101984A discusses segmenting customers based on their purchase histories;

- JP406012426A discusses segmenting customers based on their transaction data;

- Oppermann. Martin. "Destination threshold potential and the law of repeat visitation," *Journal of Travel Research*, Nov 1998 [retrieved from Dialog] discloses analyzing previous purchase history to determine future purchases;

- Pearson et al. "Transactional segmentation to slow customer defections," *Marketing Management*, Summer 1999 [retrieved from Dialog] discloses segmenting customers based on their transaction patterns;

- Wyner, Gordon A. "Segmentation analysis, then and now," *Marketing Research: A Magazine of Management & Applications*, Winter 1995 [retrieved from Dialog] discloses segmenting customers based on their degree of affinity or loyalty to a brand; and

- Hoekstra et al. "The Lifetime Value Concept in Customer-Based Marketing," *Journal of Market Focused Management*, 1999 [retrieved from Internet] discloses a mathematical formula for computing the Lifetime Value of a customer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Michelle Tarae whose telephone number is 571-272-6727. The examiner can normally be reached Monday – Friday from 8:30am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz, can be reached at 571-272-6729.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. Michelle Tarae
Patent Examiner
Art Unit 3623

September 28, 2006